

Appln No. 10/020,718

Amdt date November 29, 2004

Reply to Office action of September 30, 2004

REMARKS/ARGUMENTS

Claims 1-31 and 63-72 are presently pending. Applicant thanks the Examiner for her careful consideration of this application, and for her participation in a telephonic interview with the Applicant and his undersigned counsel of record on November 22, 2004, in which agreement was reached on claim language that distinguishes over the relied upon references, in particular Ditto, U.S. Patent 6,270,352, and places the application in condition for allowance.

In accordance with the agreement reached during the telephonic interview, Applicant has amended independent claim 1 to include the following limitation in which the "algorithm sequences the learning items to be presented ... and makes it impossible for one or more learning items [~~from-being~~] to be presented in at least one learning trial based upon the priority score associated with the learning item." A similar limitation is included in independent claims 21 and 31. All of the remaining claims depend directly or indirectly upon the noted independent claims, and therefore are also allowable for at least the reasons set forth herein.

As discussed during the interview, a central feature of the Ditto reference is that it is based on biased random selection. "Performance numbers" in Ditto give particular learning items a higher or lower probability of being selected. In Ditto, it is noted in general (Col. 17, lines 53-59) and specific embodiments that the actual problem presented on each learning trial is selected from among possible items using a random process (Col. 17, lines 33-39; Col. 18, lines 40-41; examples in Col. 17 and

Appln No. 10/020,718  
Amdt date November 29, 2004  
Reply to Office action of September 30, 2004

18). Because of its basis in biased random selection, there is no apparent way in Ditto's system to exclude a problem from appearing on a given learning trial, even if it has a low probability (See, e.g., col. 21, 12-20).

To optimize principles of learning in learning technology, Applicant has devised a system fundamentally different from a system based on Ditto's biased random selection. For example, one aspect of learning for items to be memorized according to an exemplary embodiment of Applicant's invention is that the same item preferably should not be able to come up on successive learning trials. In the exemplary embodiment, immediate reappearance allows the learner to answer to get the answer from information in short-term memory, whereas it is retrieval from long term memory that in the preferred embodiment strengthens learning. For this aspect of learning, an enforced delay in terms one or more intervening trials (for interference in short-term memory) may be helpful. Such behavior, while recognized in the exemplary embodiment of Applicant's claimed invention, cannot be obtained reliably in the Ditto system.

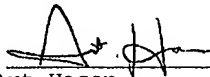
Accordingly, in the exemplary embodiment of Applicant's invention, there are many different algorithms that may be used within the scope of the invention to ensure that learning items that are not helpful for learning are rendered impossible from appearing in one or more learning trials. Applicant's invention also allows for the possibility of a prospectively deterministic system not envisioned by Ditto. Applicant's novel system, in one embodiment, enables optimization of learning for the set of items. Therefore, there are many fundamentally important and

Appln No. 10/020,718  
Amdt date November 29, 2004  
Reply to Office action of September 30, 2004

desirable kinds of behavior possible with such a learning system that simply cannot be obtained with a system such as Ditto's that is based on biased random selection.

Accordingly, Applicant respectfully requests early issuance of a Notice of Allowance of pending claims 1-31 and 63-72.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By   
Art Hasan  
Reg. No. 41,057  
626/795-9900

SAH/amb  
MEE PAS595980.1-\*--11/29/04 2:43 PM